Page 1 of 7



ENTERED

RAW SEQUENCE LISTING

3 <110> APPLICANT: Ruben et al.

PATENT APPLICATION: US/10/078,059

DATE: 03/05/2002 P.5

TIME: 14:12:03

```
5 <120> TITLE OF INVENTION: Cytokine Receptor Common Gamma Chain Like
      7 <130> FILE REFERENCE: PF466P2
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/078,059
C--> 9 <141> CURRENT FILING DATE: 2002-02-20
      9 <150> PRIOR APPLICATION NUMBER: 60/269,876
     10 <151> PRIOR FILING DATE: 2001-02-21
     12 <150> PRIOR APPLICATION NUMBER: PCT/US00/22493
     13 <151> PRIOR FILING DATE: 2000-08-17
     15 <150> PRIOR APPLICATION NUMBER: 09/376,430
     16 <151> PRIOR FILING DATE: 1999-08-18
     18 <150> PRIOR APPLICATION NUMBER: 09/263,626
     19 <151> PRIOR FILING DATE: 1999-03-05
    21 <150> PRIOR APPLICATION NUMBER: PCT/US99/05068
     22 <151> PRIOR FILING DATE: 1999-03-05
     24 <150> PRIOR APPLICATION NUMBER: 60/086,505
     25 <151> PRIOR FILING DATE: 1998-05-22
     27 <150> PRIOR APPLICATION NUMBER: 60/078,563
     28 <151> PRIOR FILING DATE: 1998-03-19
     30 <160> NUMBER OF SEQ ID NOS: 32
     32 <170> SOFTWARE: PatentIn Ver. 2.1
     34 <210> SEQ ID NO: 1
     35 <211> LENGTH: 1573
     36 <212> TYPE: DNA
     37 <213> ORGANISM: Homo sapiens
     39 <220> FEATURE:
     40 <221> NAME/KEY: CDS
     41 <222> LOCATION: (13)..(1125)
     43 <400> SEQUENCE: 1
     44 cggcacgagg gc atg ggg cgg ctg gtt ctg ctg tgg gga gct gcc gtc ttt 51
     45
                      Met Gly Arg Leu Val Leu Leu Trp Gly Ala Ala Val Phe
     46
     48 ctg ctg gga ggc tgg atg gct ttg ggg caa gga gga gca gca gaa gga
                                                                           99
     49 Leu Leu Gly Gly Trp Met Ala Leu Gly Gln Gly Gly Ala Ala Glu Gly
     50
            15
                                 20
     52 gta cag att cag atc atc tac ttc aat tta gaa acc gtg cag gtg aca
                                                                           147
     53 Val Gln Ile Gln Ile Ile Tyr Phe Asn Leu Glu Thr Val Gln Val Thr
                             35
                                                 40
     56 tgg aat goo ago aaa tao too agg aco aao otg act tto cao tao aga
                                                                           195
     57 Trp Asn Ala Ser Lys Tyr Ser Arg Thr Asn Leu Thr Phe His Tyr Arg
                         50
                                             55
                                                                  60
    60 ttc aac ggt gat gag gcc tat gac cag tgc acc aac tac ctt ctc cag
                                                                           243
     61 Phe Asn Gly Asp Glu Ala Tyr Asp Gln Cys Thr Asn Tyr Leu Leu Gln
```

RAW SEQUENCE LISTING DATE: 03/05/2002 PATENT APPLICATION: US/10/078,059 TIME: 14:12:03

62	4			65					70					75			
	αаа	aat	cac	act	tca	aaa	tac	ctc		σac	αca	αaα	cad		αac	gac	291
				Thr													271
66	014	0-1	80		001	0-1	0,0	85	шси	nop.	niu	014	90	1119	nsp	nsp	
	att	ctc		ttc	tee	atc	ада		aaa	асσ	cac	CCC		ttc	acc	αca	339
				Phe													337
70	110	95	+ <u>y</u> +	1110	UCI	110	100	ADII	GLY	T111	1113	105	Val	THE	TIIT	ALG	
	ant		taa	atg	att	tat		ata	222	000	ant		CCC	224	~~~	ata	387
				Met													307
	110	пта	пъ	Mec	Val	115	тут	пец	пуз	110	120	261	PIO	пуъ	птэ	125	
		+++	taa	tgg	cat		ant.	aa2	ata	2 00		200	+ ~+	+ 0+	~ ~ ~		435
				Trp													433
78	AIG	FIIC	261	ттр	130	GIII	ASP	мта	vaı	135	val	TIIT	Cys	ser	140	пец	
_	tac	+ 2 0	aaa	ant.		ata	+ = +	~~~	~++		+	000	244	000		~~	192
				gat Asp													483
82	Set	TYT	GIY	145	пеп	пеп	тұт	GIU	150	GIII	TÄT	AIG	ser	155	Pne	ASP	
	200	~~~	+~~		+ a a	222	~~~	~ ~ ~		200	+~~		a+ a		- t -	~~~	531
				cag Gln													221
86	1111	GIU	160	GIII	ser	гуу	GIII	165	ASII	THE	Cys	ASII	170	THE	TTG	GIU	
	~~~	++~		~~~	~~~	~~~	+~+		+ ~+	++-	+	~+ ~			~ ~ ~		E70
		_	-	gcc		-	_					-		-	_	-	579
	GTA	175	Asp	Ala	GIU	тĀR	-	TYL	ser	Pne	ттр		Arg	var	гĀг	Ala	
90							180					185		<b>.</b>	4		607
			-	gta				-				-	-				627
		GIU	ASP	Val	TYT		PIO	Asp	Thr	JAL		ser	ASP	TIP	ser		
	190		+~~	+	~~~	195		~-~			200		<b>+</b> +			205	675
				tgg								-	_	-			675
	Val	THI	Cys	Trp	210	Arg	СТУ.	GIU	TTE	_	ASP	Ald	Cys .	Ата		THE	
98							224			215		++		++	220		772
																agc Ser	723
101		, 1111	PIC	225		PIC	, гуй≅	пес	230	_	Pile	: 116	: ner			ser	
			· -+-			+.	~+~	+ -+			. ~++		. +	235			771
																g aaa	771
106		WIC	240		пеи	Met	val	245		птеп	і пес	тес	250		r TT	Lys	
		+ ~ ~	_				+++										910
																aaa	819
110		255	-	y var	гуу	пуѕ	260		. IIE	Pro	) Sei	265		ASL	PIC	Lys	
						- a+a			+-					. ++			967
																g gag n Glu	867
	270		FIIC	FIC	д СТУ	275		GIU	TIE	: nıs	280		ASI.	Pile	: GII	285	
_					200									+.	. ~~-		016
																ı ggt ı Gly	915
118		, ,,	= 7,117	. ASP	290		ASI	val	HTG	. HIS		и пта	ь та	net.	. Ala	_	
							~~~	~~~									063
																gcc	963
121		. GIC	ı GII	305		GTÄ	PIC	GIU	310		, шес	ı val	. val	. Gin		Ala	
		, ,,+	- ~			+~+	~~-					. ~~-	. ~~~				1011
																gag	TOTT
126		TIII			GIU	ser	PIC			ьeu	ASP	PIC			GIU	Glu	
170			320	,				325					330	!			

RAW SEQUENCE LISTING DATE: 03/05/2002
PATENT APPLICATION: US/10/078,059
TIME: 14:12:03

```
128 aaa gag gcc tct ggg gga tcc ctc caq ctt ccc cac cag ccc ctc caa
129 Lys Glu Ala Ser Gly Gly Ser Leu Gln Leu Pro His Gln Pro Leu Gln
130
       335
                           340
132 ggc ggt gat gtg gtc aca atc ggg ggc ttc acc ttt gtg atg aat gac
133 Gly Gly Asp Val Val Thr Ile Gly Gly Phe Thr Phe Val Met Asn Asp
                       355
                                           360
136 cgc tcc tac gtg gcg ttg tgatggacac accactgtca aagtcaacgt
                                                                    1155
137 Arg Ser Tyr Val Ala Leu
                   370
140 caggatcoac gttgacattt aaagacagag gggactgtcc cggggactcc acaccaccat 1215
142 ggatgggaag tctccacgcc aatgatggta ggactaggag actctgaaga cccagcctca 1275
144 cogoctaatg cggccactgc cctgctaact ttcccccaca tgagtctctg tgttcaaagg 1335
146 cttgatggca gatgggagcc aattgctcca ggagatttac tcccagttcc ttttcgtgcc 1395
148 tgaacgttgt cacataaacc ccaaggcagc acgtccaaaa tgctgtaaaa ccatcttccc 1455
150 actetytgag tececagtte egtecatgta cetyttecat ageattggat teteggagga 1515
155 <210> SEQ ID NO: 2
156 <211> LENGTH: 371
157 <212> TYPE: PRT
158 <213> ORGANISM: Homo sapiens
160 <400> SEQUENCE: 2
161 Met Gly Arg Leu Val Leu Trp Gly Ala Ala Val Phe Leu Leu Gly
162
    1
164 Gly Trp Met Ala Leu Gly Gln Gly Gly Ala Ala Glu Gly Val Gln Ile
               20
                                    25
167 Gln Ile Ile Tyr Phe Asn Leu Glu Thr Val Gln Val Thr Trp Asn Ala
                                40
170 Ser Lys Tyr Ser Arg Thr Asn Leu Thr Phe His Tyr Arg Phe Asn Gly
                            55
173 Asp Glu Ala Tyr Asp Gln Cys Thr Asn Tyr Leu Leu Gln Glu Gly His
174 65
                                           75
176 Thr Ser Gly Cys Leu Leu Asp Ala Glu Gln Arg Asp Asp Ile Leu Tyr
                    85
                                       90
179 Phe Ser Ile Arg Asn Gly Thr His Pro Val Phe Thr Ala Ser Arg Trp
                                   105
182 Met Val Tyr Tyr Leu Lys Pro Ser Ser Pro Lys His Val Arg Phe Ser
           115
                               120
185 Trp His Gln Asp Ala Val Thr Val Thr Cys Ser Asp Leu Ser Tyr Gly
       130
                           135
188 Asp Leu Leu Tyr Glu Val Gln Tyr Arg Ser Pro Phe Asp Thr Glu Trp
189 145
                       150
                                          155
191 Gln Ser Lys Gln Glu Asn Thr Cys Asn Val Thr Ile Glu Gly Leu Asp
                   165
                                       170
194 Ala Glu Lys Cys Tyr Ser Phe Trp Val Arg Val Lys Ala Met Glu Asp
               180
                                   185
197 Val Tyr Gly Pro Asp Thr Tyr Pro Ser Asp Trp Ser Glu Val Thr Cys
           195
                               200
200 Trp Gln Arg Gly Glu Ile Arg Asp Ala Cys Ala Glu Thr Pro Thr Pro
       210
                           215
                                              220
```

RAW SEQUENCE LISTING DATE: 03/05/2002 PATENT APPLICATION: US/10/078,059 TIME: 14:12:03

203	Pro	Lys	Pro	Lys	Leu		Lys	Phe	Ile	Leu		Ser	Ser	Leu	Ala	
	225					230					235					240
	Leu	Leu	Met	Val		Leu	Leu	Leu	Leu		Leu	Trp	Lys	Leu	Trp	Arg
207					245					250					255	
	Val	Lys	Lys		Leu	Ile	Pro	Ser		Pro	Asp	Pro	Lys		Ile	Phe
210				260					265					270		
212	Pro	Gly		Phe	Glu	Ile	His		Gly	Asn	Phe	Gln		Trp	Ile	Thr
213			275					280					285			
215	Asp	Thr	Gln	Asn	Val	Ala		Leu	His	Lys	Met		Gly	Ala	Glu	Gln
216		290					295					300				
		Ser	Gly	Pro	Glu		Pro	Leu	Val	Val		Leu	Ala	Lys	Thr	
	305					310					315					320
	Ala	Glu	Ser	Pro	Arg	Met	Leu	Asp	Pro		Thr	Glu	Glu	Lys	Glu	Ala
222					325					330					335	
	Ser	Gly	Gly	Ser	Leu	Gln	Leu	Pro		Gln	Pro	Leu	Gln		Gly	Asp
225				340					345					350		
		Val	Thr	Ile	Gly	Gly	Phe		Phe	Val	Met	Asn		Arg	Ser	Tyr
228			355					360					365			
	Val	Ala	Leu													
231		370														
235	<210)> SI	EQ II	ON C	: 3											
	<21				79				•							
	<212															
						sar	piens	3								
240	<400)> SI	COUE	NCE:	3											
			-								_					_
	Met	Leu	-		Pro	Leu	Pro	Leu	Arg		Leu	Leu	Phe	Leu	Gln	Leu
242	Met 1		Lys	Pro	Pro 5					10					15	
242 244	Met 1		Lys	Pro Gly	Pro 5				Pro	10				Pro		
242 244 245	Met 1 Pro	Leu	Lys Leu	Pro Gly 20	Pro 5 Val	Gly	Leu	Asn	Pro 25	10 Lys	Phe	Leu	Thr	Pro 30	15 Ser	Gly
242 244 245 247	Met 1 Pro	Leu	Lys Leu Asp	Pro Gly 20	Pro 5 Val	Gly	Leu	Asn Pro	Pro 25	10 Lys	Phe	Leu	Thr Asp	Pro 30	15	Gly
242 244 245 247 248	Met 1 Pro Asn	Leu Glu	Lys Leu Asp 35	Pro Gly 20 Ile	Pro 5 Val Gly	Gly Gly	Leu Lys	Asn Pro 40	Pro 25 Gly	10 Lys Thr	Phe Gly	Leu Gly	Thr Asp 45	Pro 30 Phe	15 Ser Phe	Gly Leu
242 244 245 247 248 250	Met 1 Pro Asn	Leu Glu Ser	Lys Leu Asp 35	Pro Gly 20 Ile	Pro 5 Val Gly	Gly Gly	Leu Lys Thr	Asn Pro 40	Pro 25 Gly	10 Lys Thr	Phe Gly	Leu Gly Thr	Thr Asp 45	Pro 30 Phe	15 Ser	Gly Leu
242 244 245 247 248 250 251	Met 1 Pro Asn Thr	Leu Glu Ser 50	Lys Leu Asp 35 Thr	Pro Gly 20 Ile Pro	Pro 5 Val Gly Ala	Gly Gly	Leu Lys Thr 55	Asn Pro 40 Leu	Pro 25 Gly Asp	10 Lys Thr Val	Phe Gly Ser	Leu Gly Thr 60	Thr Asp 45 Leu	Pro 30 Phe Pro	15 Ser Phe Leu	Gly Leu Pro
242 244 245 247 248 250 251 253	Met 1 Pro Asn Thr	Leu Glu Ser 50	Lys Leu Asp 35 Thr	Pro Gly 20 Ile Pro	Pro 5 Val Gly Ala	Gly Gly Gly Val	Leu Lys Thr 55	Asn Pro 40 Leu	Pro 25 Gly Asp	10 Lys Thr Val	Phe Gly Ser Tyr	Leu Gly Thr 60	Thr Asp 45 Leu	Pro 30 Phe Pro	15 Ser Phe	Gly Leu Pro Trp
242 244 245 247 248 250 251 253 254	Met 1 Pro Asn Thr Lys 65	Leu Glu Ser 50 Val	Lys Leu Asp 35 Thr	Pro Gly 20 Ile Pro Cys	Pro 5 Val Gly Ala Phe	Gly Gly Gly Val 70	Leu Lys Thr 55 Phe	Asn Pro 40 Leu Asn	Pro 25 Gly Asp Val	10 Lys Thr Val	Phe Gly Ser Tyr 75	Leu Gly Thr 60 Met	Thr Asp 45 Leu Asn	Pro 30 Phe Pro Cys	15 Ser Phe Leu Thr	Gly Leu Pro Trp 80
242 244 245 247 248 250 251 253 254 256	Met 1 Pro Asn Thr Lys 65	Leu Glu Ser 50 Val	Lys Leu Asp 35 Thr	Pro Gly 20 Ile Pro Cys	Pro 5 Val Gly Ala Phe Glu	Gly Gly Gly Val 70	Leu Lys Thr 55 Phe	Asn Pro 40 Leu Asn	Pro 25 Gly Asp Val	10 Lys Thr Val Glu Asn	Phe Gly Ser Tyr 75	Leu Gly Thr 60 Met	Thr Asp 45 Leu Asn	Pro 30 Phe Pro Cys	15 Ser Phe Leu Thr	Gly Leu Pro Trp 80
242 244 245 247 248 250 251 253 254 256 257	Met 1 Pro Asn Thr Lys 65 Asn	Leu Glu Ser 50 Val Ser	Lys Leu Asp 35 Thr Gln ser	Pro Gly 20 Ile Pro Cys Ser	Pro 5 Val Gly Ala Phe Glu 85	Gly Gly Gly Val 70 Pro	Leu Lys Thr 55 Phe Gln	Asn Pro 40 Leu Asn Pro	Pro 25 Gly Asp Val	10 Lys Thr Val Glu Asn 90	Phe Gly Ser Tyr 75 Leu	Leu Gly Thr 60 Met	Thr Asp 45 Leu Asn Leu	Pro 30 Phe Pro Cys	15 Ser Phe Leu Thr Tyr 95	Gly Leu Pro Trp 80 Gly
242 244 245 247 248 250 251 253 254 256 257 259	Met 1 Pro Asn Thr Lys 65 Asn	Leu Glu Ser 50 Val Ser	Lys Leu Asp 35 Thr Gln ser	Pro Gly 20 Ile Pro Cys Ser Phe	Pro 5 Val Gly Ala Phe Glu 85	Gly Gly Gly Val 70 Pro	Leu Lys Thr 55 Phe Gln	Asn Pro 40 Leu Asn Pro	Pro 25 Gly Asp Val Asn Lys	10 Lys Thr Val Glu Asn 90	Phe Gly Ser Tyr 75 Leu	Leu Gly Thr 60 Met	Thr Asp 45 Leu Asn Leu	Pro 30 Phe Pro Cys His	15 Ser Phe Leu Thr	Gly Leu Pro Trp 80 Gly
242 244 245 247 248 250 251 253 254 256 257 259 260	Met 1 Pro Asn Thr Lys 65 Asn	Leu Glu Ser 50 Val Ser Arg	Lys Leu Asp 35 Thr Gln Ser Asn	Pro Gly 20 Ile Pro Cys Ser Phe 100	Pro 5 Val Gly Ala Phe Glu 85 Asn	Gly Gly Val 70 Pro	Leu Lys Thr 55 Phe Gln	Asn Pro 40 Leu Asn Pro Asp	Pro 25 Gly Asp Val Asn Lys 105	10 Lys Thr Val Glu Asn 90 Leu	Phe Gly Ser Tyr 75 Leu Gln	Leu Gly Thr 60 Met Thr	Thr Asp 45 Leu Asn Leu Cys	Pro 30 Phe Pro Cys His Gly 110	15 Ser Phe Leu Thr Tyr 95 His	Gly Leu Pro Trp 80 Gly Tyr
242 244 245 247 248 250 251 253 254 256 257 260 262	Met 1 Pro Asn Thr Lys 65 Asn Tyr	Leu Glu Ser 50 Val Ser Arg	Lys Leu Asp 35 Thr Gln Ser Asn	Pro Gly 20 Ile Pro Cys Ser Phe 100	Pro 5 Val Gly Ala Phe Glu 85 Asn	Gly Gly Val 70 Pro	Leu Lys Thr 55 Phe Gln	Asn Pro 40 Leu Asn Pro Asp Ser	Pro 25 Gly Asp Val Asn Lys 105	10 Lys Thr Val Glu Asn 90 Leu	Phe Gly Ser Tyr 75 Leu Gln	Leu Gly Thr 60 Met Thr	Thr Asp 45 Leu Asn Leu Cys Gly	Pro 30 Phe Pro Cys His Gly 110	15 Ser Phe Leu Thr Tyr 95	Gly Leu Pro Trp 80 Gly Tyr
242 244 245 247 248 250 251 253 254 256 257 260 262 263	Met 1 Pro Asn Thr Lys 65 Asn Tyr	Leu Glu Ser 50 Val Ser Arg	Lys Leu Asp 35 Thr Gln Ser Asn Ser 115	Pro Gly 20 Ile Pro Cys Ser Phe 100 Glu	Pro 5 Val Gly Ala Phe Glu 85 Asn Gly	Gly Gly Val 70 Pro Gly Ile	Leu Lys Thr 55 Phe Gln Asp	Asn Pro 40 Leu Asn Pro Asp Ser 120	Pro 25 Gly Asp Val Asn Lys 105 Gly	10 Lys Thr Val Glu Asn 90 Leu Cys	Phe Gly Ser Tyr 75 Leu Gln	Leu Gly Thr 60 Met Thr Glu Phe	Thr Asp 45 Leu Asn Leu Cys Gly 125	Pro 30 Phe Pro Cys His Gly 110 Lys	15 Ser Phe Leu Thr Tyr 95 His	Gly Leu Pro Trp 80 Gly Tyr Glu
242 244 245 247 248 250 251 253 254 256 257 260 262 263 265	Met 1 Pro Asn Thr Lys 65 Asn Tyr	Leu Glu Ser 50 Val Ser Arg Phe Arg	Lys Leu Asp 35 Thr Gln Ser Asn Ser 115	Pro Gly 20 Ile Pro Cys Ser Phe 100 Glu	Pro 5 Val Gly Ala Phe Glu 85 Asn Gly	Gly Gly Val 70 Pro Gly Ile	Leu Lys Thr 55 Phe Gln Asp . Thr	Asn Pro 40 Leu Asn Pro Asp Ser 120	Pro 25 Gly Asp Val Asn Lys 105 Gly	10 Lys Thr Val Glu Asn 90 Leu Cys	Phe Gly Ser Tyr 75 Leu Gln	Leu Gly Thr 60 Met Thr Glu Phe	Thr Asp 45 Leu Asn Leu Cys Gly 125	Pro 30 Phe Pro Cys His Gly 110 Lys	15 Ser Phe Leu Thr Tyr 95 His	Gly Leu Pro Trp 80 Gly Tyr Glu
242 244 245 247 248 250 251 253 254 256 262 263 265 266	Met 1 Pro Asn Thr Lys 65 Asn Tyr Leu Ile	Leu Glu Ser 50 Val Ser Arg Phe Arg 130	Lys Leu Asp 35 Thr Gln ser Asn Ser 115 Leu	Pro Gly 20 Ile Pro Cys ser Phe 100 Glu Tyr	Pro 5 Val Gly Ala Phe Glu 85 Asn Gly Glu	Gly Gly Val 70 Pro Gly Ile	Leu Lys Thr 55 Phe Gln Asp Thr Phe 135	Asn Pro 40 Leu Asn Pro Asp Ser 120 Val	Pro 25 Gly Asp Val Asn Lys 105 Gly Val	10 Lys Thr Val Glu Asn 90 Leu Cys	Phe Gly Ser Tyr 75 Leu Gln Trp Leu	Leu Gly Thr 60 Met Thr Glu Phe Gln 140	Thr Asp 45 Leu Asn Leu Cys Gly 125 Asp	Pro 30 Phe Pro Cys His Gly 110 Lys	15 Ser Phe Leu Thr Tyr 95 His Lys	Gly Leu Pro Trp 80 Gly Tyr Glu Glu
242 244 245 247 248 250 251 253 254 256 262 263 265 266 268	Met 1 Pro Asn Thr Lys 65 Asn Tyr Leu Ile His	Leu Glu Ser 50 Val Ser Arg Phe Arg 130	Lys Leu Asp 35 Thr Gln ser Asn Ser 115 Leu	Pro Gly 20 Ile Pro Cys ser Phe 100 Glu Tyr	Pro 5 Val Gly Ala Phe Glu 85 Asn Gly Glu	Gly Gly Val 70 Pro Gly Ile Thr	Leu Lys Thr 55 Phe Gln Asp Thr Phe 135	Asn Pro 40 Leu Asn Pro Asp Ser 120 Val	Pro 25 Gly Asp Val Asn Lys 105 Gly Val	10 Lys Thr Val Glu Asn 90 Leu Cys	Phe Gly Ser Tyr 75 Leu Gln Trp Leu Leu	Leu Gly Thr 60 Met Thr Glu Phe Gln 140	Thr Asp 45 Leu Asn Leu Cys Gly 125 Asp	Pro 30 Phe Pro Cys His Gly 110 Lys	15 Ser Phe Leu Thr Tyr 95 His	Gly Leu Pro Trp 80 Gly Tyr Glu Glu Ile
242 244 245 247 248 250 251 253 254 256 262 263 265 266 268 269	Met 1 Pro Asn Thr Lys 65 Asn Tyr Leu Ile His 145	Leu Glu Ser 50 Val Ser Arg Phe Arg 130 Arg	Lys Leu Asp 35 Thr Gln Ser Asn Ser 115 Leu Lys	Pro Gly 20 Ile Pro Cys Ser Phe 100 Glu Tyr Gln	Pro 5 Val Gly Ala Phe Glu 85 Asn Gly Glu Pro	Gly Gly Val 70 Pro Gly Ile Thr Lys 150	Leu Lys Thr 55 Phe Gln Asp Thr Phe 135 Gln	Asn Pro 40 Leu Asn Pro Asp Ser 120 Val Met	Pro 25 Gly Asp Val Asn Lys 105 Gly Val Leu	10 Lys Thr Val Glu Asn 90 Leu Cys Gln Lys	Phe Gly Ser Tyr 75 Leu Gln Trp Leu Leu 155	Leu Gly Thr 60 Met Thr Glu Phe Gln 140 Gln	Thr Asp 45 Leu Asn Leu Cys Gly 125 Asp	Pro 30 Phe Pro Cys His Gly 110 Lys Pro Leu	15 Ser Phe Leu Thr Tyr 95 His Lys Arg	Gly Leu Pro Trp 80 Gly Tyr Glu Glu Ile 160
242 244 245 247 248 250 251 253 254 256 262 263 265 266 268 269 271	Met 1 Pro Asn Thr Lys 65 Asn Tyr Leu Ile His 145	Leu Glu Ser 50 Val Ser Arg Phe Arg 130 Arg	Lys Leu Asp 35 Thr Gln Ser Asn Ser 115 Leu Lys	Pro Gly 20 Ile Pro Cys Ser Phe 100 Glu Tyr Gln	Pro 5 Val Gly Ala Phe Glu 85 Asn Gly Glu Pro Glu	Gly Gly Val 70 Pro Gly Ile Thr Lys 150	Leu Lys Thr 55 Phe Gln Asp Thr Phe 135 Gln	Asn Pro 40 Leu Asn Pro Asp Ser 120 Val Met	Pro 25 Gly Asp Val Asn Lys 105 Gly Val Leu	10 Lys Thr Val Glu Asn 90 Leu Cys Gln Lys	Phe Gly Ser Tyr 75 Leu Gln Trp Leu Leu 155	Leu Gly Thr 60 Met Thr Glu Phe Gln 140 Gln	Thr Asp 45 Leu Asn Leu Cys Gly 125 Asp	Pro 30 Phe Pro Cys His Gly 110 Lys Pro Leu	15 Ser Phe Leu Thr 75 His Lys Arg Val	Gly Leu Pro Trp 80 Gly Tyr Glu Glu Ile 160
242 244 245 247 248 250 251 253 254 256 263 265 266 268 269 271 272	Met 1 Pro Asn Thr Lys 65 Asn Tyr Leu Ile His 145 Pro	Leu Glu Ser 50 Val Ser Arg Phe Arg 130 Arg	Lys Leu Asp 35 Thr Gln Ser Asn Ser 115 Leu Lys Ala	Pro Gly 20 Ile Pro Cys Ser Phe 100 Glu Tyr Gln Pro	Pro 5 Val Gly Ala Phe Glu 85 Asn Gly Glu Pro Glu 165	Gly Gly Val 70 Pro Gly Ile Thr Lys 150 Asn	Leu Lys Thr 55 Phe Gln Asp Thr Phe 135 Gln Leu	Asn Pro 40 Leu Asn Pro Asp Ser 120 Val Met	Pro 25 Gly Asp Val Asn Lys 105 Gly Val Leu Leu	10 Lys Thr Val Glu Asn 90 Leu Cys Gln Lys Arg 170	Phe Gly Ser Tyr 75 Leu Gln Trp Leu Leu 155 Asn	Leu Gly Thr 60 Met Thr Glu Phe Gln 140 Gln Leu	Thr Asp 45 Leu Asn Leu Cys Gly 125 Asp Asp Ser	Pro 30 Phe Pro Cys His Gly 110 Lys Pro Leu Glu	15 Ser Phe Leu Thr 75 His Lys Arg Val Phe 175	Gly Leu Pro Trp 80 Gly Tyr Glu Glu Ile 160 Gln
242 244 245 247 248 250 251 253 254 256 263 265 266 268 269 271 272	Met 1 Pro Asn Thr Lys 65 Asn Tyr Leu Ile His 145 Pro	Leu Glu Ser 50 Val Ser Arg Phe Arg 130 Arg	Lys Leu Asp 35 Thr Gln Ser Asn Ser 115 Leu Lys Ala	Pro Gly 20 Ile Pro Cys Ser Phe 100 Glu Tyr Gln Pro	Pro 5 Val Gly Ala Phe Glu 85 Asn Gly Glu Pro Glu 165	Gly Gly Val 70 Pro Gly Ile Thr Lys 150 Asn	Leu Lys Thr 55 Phe Gln Asp Thr Phe 135 Gln Leu	Asn Pro 40 Leu Asn Pro Asp Ser 120 Val Met	Pro 25 Gly Asp Val Asn Lys 105 Gly Val Leu Leu	10 Lys Thr Val Glu Asn 90 Leu Cys Gln Lys Arg 170	Phe Gly Ser Tyr 75 Leu Gln Trp Leu Leu 155 Asn	Leu Gly Thr 60 Met Thr Glu Phe Gln 140 Gln Leu	Thr Asp 45 Leu Asn Leu Cys Gly 125 Asp Asp Ser	Pro 30 Phe Pro Cys His Gly 110 Lys Pro Leu Glu	15 Ser Phe Leu Thr 75 His Lys Arg Val	Gly Leu Pro Trp 80 Gly Tyr Glu Glu Ile 160 Gln

RAW SEQUENCE LISTING DATE: 03/05/2002 PATENT APPLICATION: US/10/078,059 TIME: 14:12:03

Input Set : A:\PF466P2SEQLIST01102002.txt
Output Set: N:\CRF3\03052002\J078059.raw

```
277 Leu Val Gln Tyr Arg Ser Asp Arg Asp Arg Ser Trp Thr Glu Gln Ser
278
            195
                                                     205
280 Val Asp His Arg His Ser Phe Ser Leu Pro Ser Val Asp Ala Gln Lys
        210
                             215
283 Leu Tyr Thr Phe Arg Val Arg Ser Arg Tyr Asn Pro Leu Cys Gly Ser
                        230
                                             235
286 Ala Gln His Trp Ser Asp Trp Ser Tyr Pro Ile His Trp Gly Ser Asn
                                         250
289 Thr Ser Lys Glu Asn Ile Glu Asn Pro Glu Asn Pro Ser Leu Phe Ala
290
                260
292 Leu Glu Ala Val Leu Ile Pro Leu Gly Ser Met Gly Leu Ile Val Ser
293
            275
                                 280
295 Leu Ile Cys Val Tyr Cys Trp Leu Glu Arg Thr Met Pro Arg Ile Pro
                            295
                                                 300
298 Thr Leu Lys Asn Leu Glu Asp Leu Val Thr Glu Tyr Gln Gly Asn Phe
299 305
                        310
301 Ser Ala Trp Ser Gly Val Ser Lys Gly Leu Ala Glu Ser Leu Gln Pro
302
                    325
                                         330
304 Asp Tyr Ser Glu Arg Leu Cys His Val Ser Glu Ile Pro Pro Lys Gly
                                     345
307 Gly Glu Gly Pro Gly Gly Ser Pro Cys Ser Gln His Ser Pro Tyr Trp
308
            355
310 Ala Pro Pro Cys Tyr Thr Leu Lys Pro Glu Pro
311
        370
                            375
314 <210> SEO ID NO: 4
315 <211> LENGTH: 733
316 <212> TYPE: DNA
317 <213> ORGANISM: Homo sapiens
319 <400> SEQUENCE: 4
320 gggatccgga gcccaaatct tctgacaaaa ctcacacatg cccaccgtgc ccagcacctg 60
321 aattcgaggg tgcaccgtca gtcttcctct tccccccaaa acccaaggac accctcatga 120
322 teteceggae teetgaggte acatgegtgg tggtggaegt aagceaegaa gaeeetgagg 180
323 tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
324 aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
325 ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca acccccatcg 360
326 agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420
327 catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480
328 atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540
329 ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600
330 acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
331 acaaccacta cacgcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc 720
332 gactctagag gat
                                                                       733
335 <210> SEQ ID NO: 5
336 <211> LENGTH: 5
337 <212> TYPE: PRT
338 <213> ORGANISM: Homo sapiens
340 <220> FEATURE:
341 <221> NAME/KEY: SITE
342 <222> LOCATION: (3)
```



Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/078,059

DATE: 03/05/2002

TIME: 14:12:04

Input Set : A:\PF466P2SEQLIST01102002.txt
Output Set: N:\CRF3\03052002\J078059.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:560 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:580 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:625 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:719 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:783 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:835 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:844 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:894 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30